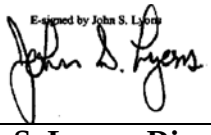
Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
200 Fair Oaks Lane, 1st Floor
Frankfort, Kentucky 40601
(502) 564-3999

AIR QUALITY PERMIT
Issued under 401 KAR 52:030

Permittee Name:	**Ensign-Bickford Aerospace & Defense Company**
Mailing Address:	**State Route 175, P.O. Box 219, Graham, KY 42344**
Source Name:	**Ensign-Bickford Aerospace & Defense Company**
Mailing Address:	**State Route 175 Graham, KY 42344**
Source Location:	**State Route 175**
Permit ID:	**F-07-017 (Revision 1)**
Agency Interest #:	**40689**
Activity ID:	**APE20080002**
Review Type:	**Conditional Major / Synthetic Minor, Operating**
Source ID:	**21-177-00079**
Regional Office:	**Owensboro Regional Office 3032 Alvey Park Dr. W., Suite 700 Owensboro, KY 42303 (270) 687-7304**
County:	**Muhlenberg**
Application Complete Date:	**September 7, 2008**
Issuance Date:	**September 21, 2007**
Revision Date:	**September 24, 2008**
Expiration Date:	**September 21, 2012**



John S. Lyons, Director
Division for Air Quality

Revised 09/29/06

TABLE OF CONTENTS

	Permit type	**Log or Activity#**	**Complete Date**	**Issuance Date**	**Summary of Action**
F-07-017	**Conditional Major Operating Permit**	**APE20070001**	**4/17/2007**	**TBD**	**Initial Conditional Major Operating Permit**
Revision 1	**Conditional Major Operating Permit**	**APE20080001**	**9/2/2008**	**TBD**	**Minor Revision, addition and Operation**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 50:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

13 (MIEH-1) MFR Heat Exchanger:

Type:	Cleveland Brooks LFME-12 (Serial # 0-14085)
Maximum Rating:	5 MMBtu/hr
Construction Date:	1994
Control Device:	None
Fuel:	Natural Gas

APPLICABLE REGULATIONS:

401 KAR 59:015, *New Indirect Heat Exchangers*, particulate matter and sulfur dioxide emissions limitations apply to affected facilities with a capacity of 250 million Btu/hr heat input or less and greater than one (1) million Btu/hr, and constructed after April 9, 1972.

1. Operating Limitations:

Only natural gas shall be used as the fuel.

***Compliance Demonstration Method*:**

See **Specific Monitoring, Recordkeeping, and Reporting Requirements** below.

2. Emission Limitations:

a. Pursuant to 401 KAR 59:015, Section 4(1)(a), emissions of particulate matter (PM) from the combustion of natural gas shall not exceed 0.56 lbs/MMBtu actual heat input, based on a three-hour average.

b. Pursuant to 401 KAR 59:015, Section 4 (2), visible emissions shall not exceed twenty (20) percent opacity based on a six-minute average except:
   i. A maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning of the fire box or blowing soot.
   ii. For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

c. Pursuant to 401 KAR 59:015, Section 5(1)(a), sulfur dioxide (SO_2) emissions shall not exceed 3 lbs/MMBtu actual heat input, based on a 24-hour average.

d. Also refer to **Section D.3 Source Emission Limitations** for volatile organic compound (VOC) emission limitations for the source.

***Compliance Demonstration Method*:**

While burning natural gas, unit MIEH-1 is considered to be in compliance with particulate matter, sulfur dioxide and opacity standards.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following information:

a. The monthly amount of natural gas usage in the unit (cubic feet/month).
b. The monthly hours of operation of the unit.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records in accordance with **4. Specific Monitoring Requirements.**
b. All records shall be maintained in accordance with **Section F.2**.

6. Specific Reporting Requirements:

a. The permittee shall submit a report of the monthly natural gas usage to the Division for Air Quality's Paducah office in accordance with **Section F.5 and F.8**.
b. Reports shall be submitted in accordance with **Section F.6.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

10 Multiple Reaction Facility (MRF):

10 (17) MFR MAPO Production **(Idle)**

Construction Date: October 1991

Components: 1000 gallon Stainless Steel Reactor (RX915)
Manufacturer: Pfaudler
Model: E380-1410

High Volume / Low Vacuum Nash Vacuum Pump
Manufacturer: Nash
Model: CH 9626 EB
(VP001)

Low Volume/High Vacuum Busch Vacuum Pump
Manufacturer: Busch
Model: Hucke pack H00437, FIH6, 1111 Vacuum Pump
(VP518)

MAPO Shell & Tube Heat Exchanger (HX536)
600-Gallon Stainless Steel Vacuum Receiver (VR6000)
MAPO Condenser (HX3011)

Control Device # 1: MAPO Shell & Tube Heat Exchanger (HX536)
Manufacturer: ITT Standard
Model: 04024 SSCF
Install date: 1998
Efficiency: 80%

Control Device # 2: MAPO Condenser (HX3011)
Manufacturer: ITT Standard
Model: 08066 SSCF-C
Install Date: 2008
Efficiency: 80%

10 (25) GAP-1 and GAP-2 (Glycidyl Azide Polymer)

Construction Date: October 1991

Components: 1000 gallon Stainless Steel Reactor (RX915)
Manufacturer: Pfaudler
Model: E380-1410

Low Volume/High Vacuum Busch Vacuum Pump
Manufacturer: Busch
Model: Huckepack H00437, FIH6 1111 Vacuum Pump
(VP518)

ITT Standard Shell & Tube Heat Exchanger (HX536)

600-gallon Stainless Steel Vacuum Receiver (VR6000)

Control device: GAP Shell & Tube Heat Exchanger (HX536)

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Manufacturer: ITT Standard
Model: 04024 SSCF
Install date: 1998
Efficiency: 88%

Tanks:

08 Methylene Chloride:

08 (MTF-6) – TK3001	MRF 99% MeCl Raw Material Storage Tank Construction Date: October 1996 Capacity: 5,000 gallons Control Device: None
08 (MTF-7) – TK3000	MRF 99% MeCl Recovery Tank Construction Date: October 1991 Capacity: 1,400 gallons Control Device: None

09 GAP:

09 (MTF-12) – TK503	MRF Isobutyrate Recovery Tank Construction Date: October 1991 Capacity: 5,000 gallons Control Device: None

APPLICABLE REGULATIONS:

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality.

NON-APPLICABLE REGULATIONS:

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for VOC emissions increases from EP 10 (25). This modification was approved by the Division on July 30, 1999 as Permit Number F-98-006. VOC emissions from EP 10 (25) shall be controlled using GAP Shell & Tube Heat Exchanger (HX536) in accordance with the requirements of this section.

1. **Operating Limitations:**
   - **a.** Pursuant to 401 KAR 63:020, Section 3, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.
   - **b.** To preclude the applicability of 401 KAR 51:017, the condensers associated with EP 10 (25) must be in operation as specified in **7. Specific Control Equipment Operating**
   - **c.** To preclude the applicability of 401 KAR 51:017, the condensers associated with EP 10 (17) must be in operation as specified in 7. Specific Control Equipment Operating Conditions.

Conditions.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Material usage shall be restricted such that the limits specified in Section D 3. Source Emission Limitations are not exceeded

***Compliance Demonstration Method*:**

a. Refer to **3. Testing Requirements**, **5. Specific Recordkeeping Requirements**, and **7. Specific Control Equipment Operating Conditions** below.
b. Also refer to **Section D 3. Source Emission Limitations, *Compliance Demonstration Method.***

2. Emission Limitations:

Refer to **Section D 3. Source Emission Limitations**.

***Compliance Demonstration Method*:**

Refer to **Section D 3. Source Emission Limitations, *Compliance Demonstration Method.***

3. Testing Requirements:

a. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using Reference Methods specified in 401 KAR 50:015 shall be conducted upon startup to establish critical operational parameters **for the new control equipment listed under MAPO Shell & Tube Heat Exchanger (HX536).**

b. A mass balance analysis shall be used to evaluate condenser efficiency (efficiency of condensing methylene chloride in EP 10 (17) and isobutyl isobutyrate in EP 10 (25)) for a given set of operating conditions within critical operational limitations (see table below on page 7). Condensers must demonstrate removal efficiencies of at least 80% and 89.1% for methylene chloride and isobutyl isobutyrate, respectively.

c. See **Section G. 5 Testing Requirements**.

d. Within 90 days of the issuance of this permit, the permittee shall perform mass balance for Methylene Chloride(MeCl) on the Mapo Shell & Tube Heat Exchanger associated with EP 10(17). The permittee shall use the results to comply with **source wide limits** to preclude applicability of 401 KAR 52:020. Submit the mass balance results to the DAQ Regional office listed on the front page and to central office in Frankfort.

4. Specific Monitoring Requirements:

The permittee shall monitor the critical operational parameters as specified in **7. Specific Control Equipment Operating Conditions**.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the critical operational parameters as specified in **7. Specific Control Equipment Operating Conditions**.

6. Specific Reporting Requirements:

The permittee shall report any exceedances or excursions from emission limitations or operating limitations in accordance with **Section F- Monitoring, Recordkeeping, and Reporting Requirements**.

7. Specific Control Equipment Operating Conditions:

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The condensers associated with EP 10 (17), and EP 10 (25), must be operated at all times during production with a recovery efficiency of at least 80% and 88%, respectively.

***Compliance Demonstration Method*:**

a. The MAPO process (EP 10 (17)) shall be deemed to be in compliance when the critical operational parameters are within ranges listed in the following table. Deviations from these ranges shall be investigated and corrective action taken.
b. The GAP process (EP 10 (25)) shall be deemed to be in compliance when the critical operational parameters are within the ranges listed in the following table. Deviations from these ranges shall be investigated and corrective action taken.

GAP Shell & Tube Exchanger (HX536) EP 10 (25)

Critical Operational Parameters	Operating Limitation	Control Point Location, Type and ID Tag	Recordkeeping Frequency
Shell Side Coolant Inlet Temperature	40°F (4°C) Maximum	Mechanical Room Chiller Outlet Thermocouple (TE35)	Continuously throughout the batch
Shell Side Coolant outlet Temperature	60°F (16°C) Maximum	Vacuum Pump Room Heat Exchanger Outlet Thermocouple (TE29)	Continuously throughout the batch
Coolant Flow Rate	11.7 gpm Minimum	Mechanical Room Chiller Outlet Rotameter (RM251)	Hourly throughout the batch
Tube Side Reactor Vapor Inlet Temperature	300°F (148°C) Maximum	MRF Reactor Vapor Outlet Thermocouple (TE24)	Continuously throughout the batch
Tube Side Reactor Vapor Outlet Temperature	104°F (40°C) Maximum	Vacuum Pump Room Heat Exchanger Outlet Thermocouple (TE33)	Continuously throughout the batch
Pressure drop range	> 1.0 in H_2O	Vacuum Pump Room Building Inlet/Outlet on Heat Exchanger Differential Pressure Gauge (P108)	Hourly throughout the batch

Note: Continuous readings are intended as readings that are taken manually and recorded every 30 mi

MAPO Condenser (HX3011) EP 10 (17)

Critical Operational Parameters	MAPO Process Design Parameters	Proposed MAPO Process Operating Limitations	Control Point Location, Type and ID Tag	Recordkeeping Frequency
Shell Side Coolant Inlet Temperature	35 - 40°F	40°F Maximum	Process Area Chiller Outlet Temperature Indicator (TI37)	Continuously throughout the batch
Shell Side Collant Outlet	50 - 60°F	60°F Maximum	Process Area Heat Exchanger Outlet Temperature Indicator (TI38)	Continuously throughout the batch

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Coolant Flow Rate	17.3 - 30.0 gpm	17.3 gpm minimum	Process Area Rotameter (RM1055)	Hourly throughout the batch
Tube Side ReactorVapor Inlet Temperature	75 - 105°F	105°F Maximum	MRF Reactor Vapor Outlet Thermocouple (TE24)	Continuously throughout the batch
Tube Side Heat Exchanger Vapor Oulet Temperature	50 - 70°F	70°F Maximum	Process Area Heat Exchanger Outlet Temperature Indicator (TI36)	Continuously throughout the batch
Pressure Drop Range	0.5 - 1.0 in H_2O	≥ 0.5 in H_2O	Process Area Inlet / Outlet on Heat Exchanger Differential Pressure Gauge (PR5016)	Hourly throughout the batch
Critical Operational Parameters	**MAPO Process Design Parameters**	**Proposed MAPO Process Operating Limitations**	**Control Point Location, Type and ID Tag**	**Recordkeeping Frequency**
Shell Side Coolant Inlet Temperature	35 - 40°F	40°F Maximum	Process Area Chiller Outlet Temperature Indicator (TI37)	Continuously throughout the batch
Shell Side Collant Outlet	50 - 60°F	60°F Maximum	Process Area Heat Exchanger Outlet Temperature Indicator (TI38)	Continuously throughout the batch
Coolant Flow Rate	17.3 - 30.0 gpm	17.3 gpm minimum	Process Area Rotameter (RM1055)	Hourly throughout the batch
Tube Side ReactorVapor Inlet Temperature	75 - 105°F	105°F Maximum	MRF Reactor Vapor Outlet Thermocouple (TE24)	Continuously throughout the batch
Tube Side Heat Exchanger Vapor Oulet Temperature	50 - 70°F	70°F Maximum	Process Area Heat Exchanger Outlet Temperature Indicator (TI36)	Continuously throughout the batch
Pressure Drop Range	0.5 - 1.0 in H_2O	≥ 0.5 in H_2O	Process Area Inlet / Outlet on Heat Exchanger Differential Pressure Gauge (PR5016)	Hourly throughout the batch

Note: "Continuously throughout the batch" readings are inteded as readings that are taken manually and recorded every 30 minutes.

MAPO Shell & Tube Heat Exchanger (HX536) EP 10 (17)

Critical Operational	**MAPO Process**	**Proposed MAPO Process**	**Control Point Location, Type and ID Tag**	**Recordkeeping Frequency**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Parameters	Design Parameters	Operating Limitations		
Shell Side Coolant Inlet Temperature	35 - 40°F	40°F Maximum	Mechanical Room Chiller Outlet Thermocouple (TE35)	Continuously throughout the batch
Shell Side Collant Outlet	50 - 60°F	60°F Maximum	Vacuum Pump Room Heat Exchanger Outlet Thermocouple (TE29)	Continuously throughout the batch
Coolant Flow Rate	11.7 - 30.0 gpm	11.7 gpm minimum	Heat exchanger in Vacuum Pump Room Rotameter (RM1054)	Hourly throughout the batch
Tube Side ReactorVapor Inlet Temperature	75 - 105°F	105°F Maximum	MRF Reactor Vapor Outlet Thermocouple (TE24)	Continuously throughout the batch
Tube Side Heat Exchanger Vapor Oulet Temperature	60 - 90°F	90°F Maximum	Vacuum Pump Room Heat Exchanger Outlet Thermocouple (TE34)	Continuously throughout the batch
Pressure Drop Range	0.5 - 1.0 in H_2O	$\geq$ 0.5 in H_2O	Vacuum Pump Room Building Inlet / Outlet on Heat Exchanger Differential Pressure Gauge (PR5015)	Hourly throughout the batch

Note: "Continuously throughout the batch" readings are inteded as readings that are taken manually and recorded every 30 minutes.

(99) Outdoor Test Site:

Explosives detonation for quality control, R&D, and product demonstrations
Maximum Rating: 8 lb/hr net explosive weight
Construction Date: 2000
Control Device: None

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive Emissions, is applicable to each affected facility as an apparatus, operation, or road which emits or may emit fugitive emissions provided that the fugitive emissions from such facility are not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to 401 KAR 63:010, Section 3(2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

***Compliance Demonstration Method*:**
See **4. Specific Monitoring Requirements.**

3. Testing Requirements:
None

4. Specific Monitoring Requirements:
a. Visual observations shall be made during each shift when detonating product to determine if any fugitive air emissions are being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, a dust suppressant agent shall be applied to minimize the fugitive air emissions so as to comply with the applicable requirements of 401 KAR 63:010 as listed above.
b. The permittee shall monitor and maintain records of the monthly amount and composition of explosives being tested and the hours of operation of the facility.

5. Specific Recordkeeping Requirements:
a. The permittee shall maintain records in accordance with **4. Specific Monitoring Requirements.**
b. All records shall be maintained in accordance with **Section F.2**.

6. Specific Reporting Requirements:
None

SECTION C – INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

EP#	Description	Generally Applicable Regulation
(01)	Parts cleaners using water and/or alkaline cleaning solutions	None
(02)	MTF-8 and MTF-9. MRF 99% acetone storage tanks 8 and 9	None
(03)	MTF-10 and MTF-11. MRF 20% acetone storage tanks 10 and 11	None
(04)	MRF Boil Tank #1 – 1000 gallons	None
(05)	MRF Boil Tank #2 – 500 gallons	None
(06)	Touchup painting using low VOC water-based paint.	None
(07)	Boric Acid vapor collection from explosive mixing operation	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Volatile organic compounds (VOC), single hazardous air pollutant (HAP) and combined HAP emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

3. **Source Emission Limitations:**
   To preclude the applicability of 401 KAR 52:020, *Title V Permits,* the total annual source-wide emissions shall not exceed the following limitations on a twelve (12) consecutive month basis:
   a. Volatile organic compound (VOC) emissions shall not equal or exceed 90 tons per twelve (12) consecutive month basis;
   b. Emissions of any single hazardous air pollutants (HAP) shall not exceed 9 tons per twelve (12) consecutive month basis; and
   c. Emissions of combined hazardous air pollutant (HAPs) shall not exceed 22.5 tons per twelve (12) consecutive month basis.

   ***Compliance Demonstration Method*:**
   Compliance with annual emissions and processing limitations imposed pursuant to 401 KAR 52:030, and contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months. Monthly emissions of VOC, single and combined HAPs shall be calculated and shall be used to calculate rolling twelve (12) month total. The rolling twelve month total shall be calculated for VOC, single HAP and combined HAPs on a monthly basis and shall be compared to the above annual limits.

4. **Specific Recordkeeping Requirements:**
   a. Actual VOC single HAP and combined HAPs emissions shall be determined and recorded on a monthly and consecutive 12-month basis in accordance with **Source Emission Limitations 3, *Compliance Demonstration Method***.
   b. The permittee shall maintain records onsite such that they are readily accessible. The permittee shall provide these records to Division personnel upon request.
   c. All records shall be maintained for a period of at least five years in accordance with **Section F.2**.

5. **Source Reporting Requirements:**
   The permittee shall report on a semiannual basis to the Division's Owensboro Regional Office showing the monthly and 12 consecutive month total VOC and HAP emissions as required in Condition 4.a of this section. Also see **Section F.5**

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place (as defined in this permit), and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

9. Pursuant to 401 KAR 52:030, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Drive W., Suite 700
Owensboro, KY 42303-2191

Division for Air Quality
Central Files
200 Fair Oaks Lane, 1st Floor
Frankfort, KY 40601

10. In accordance with 401 KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission report is not mailed to the permittee, the permittee shall comply with all other emission reporting requirements in this permit.

11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:

a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
   i. The size and location of both the original and replacement units; and
   ii. Any resulting change in emissions;
b. The PTE of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
d. The replacement unit shall comply with all applicable requirements; and
e. The source shall notify Regional office of all shutdowns and start-ups.
f. Within six (6) months after installing the replacement unit, the owner or operator shall:
   (1) Re-install the original unit and remove or dismantle the replacement unit; or
   (2) Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030, Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
      (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

SECTION G - GENERAL PROVISIONS (CONTINUED)

e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].

l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.

SECTION G - GENERAL PROVISIONS (CONTINUED)

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
   (1) Applicable requirements that are included and specifically identified in this permit; and
   (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

3. Permit Revisions

a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

   No construction authorized by this permit.

5. Testing Requirements

   a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

   b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

   c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

   If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

   1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
      (1) An emergency occurred and the permittee can identify the cause of the emergency;
      (2) The permitted facility was at the time being properly operated;

SECTION G - GENERAL PROVISIONS (CONTINUED)

(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
(4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
(5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

2. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

8. Ozone depleting substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
(3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

   a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

      RMP Reporting Center
      P.O. Box 1515
      Lanham-Seabrook, MD 20703-1515

   b. If requested, submit additional relevant information to the Division or the U.S. EPA..

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None